

## **REMARKS**

Claims 1, 2, 4, 6-9, 27-28, and 30-32 are currently pending in the Application. Claim 1, 21, and 25 are currently amended, without acquiescence in the cited basis for rejections or prejudice to pursue the original claims in a related application. No new matter has been added.

### **I. Rejections of Claims under 35 USC § 103(a)**

Claims 1-2, 4, 6-9, 27-28, and 30 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Wong (Pub. No. 2004/0264464) in view of, in view of Tang et al. (U.S. Patent No. 6,553,028 B1), Herriot (U.S. Patent No. 5,929,792), and Fig. 1 of U.S. Pub. No. 2005/0083839 by Singh et al. (hereinafter Singh.) Applicants respectfully traverse.

Without acquiescence in the cited basis for rejection or prejudice to pursue the original claim in a related application, independent claim 1 is currently amended and recites at least the following limitations.

a number of duplications of the packet for each of at least some of the plurality of output ports is controlled by descriptors arranged in the linked-list table and is duplicated on a per port basis by transmitting the packet to at least some of the plurality of output ports that are specified in at least some of the descriptors for duplication rather than by transmitting the packet, which has been received at the input port, to all of the plurality of output ports, in which the multicast packet duplication system is configured for improving a size of memory utilized by the multicast packet duplication system by using at least some of the descriptors rather than by expanding physical memory to cover all possible duplication requests, at least one of the one or more descriptor is shared among multiple output ports of the plurality of output ports, and

(emphasis added.)

Applicants respectfully submit that neither Wong nor Tang teaches, discloses, or suggests these claim limitations.

A. Applicants respectfully submit that the U.S. Court of Appeals for the Federal Circuit held that “[t]he Supreme Court went on to state that ‘when a patent simply arranges old elements . . . the combination is obvious’ (citation omitted)”, and that “[t]he opposite conclusion would follow, however, if the prior art indicated that the invention would not have worked for its intended purpose or otherwise taught away from the invention. (Citation omitted.)” *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, \_\_\_\_ (Fed. Cir. 2009) (emphasis added.)

(i) Claim 1 recites at least the claimed limitation “the multicast packet duplication system is configured for improving a size of memory utilized by the multicast packet duplication system by using at least some of the descriptors rather than by expanding physical memory to cover all possible duplication requests”.

Fig. 1 of Singh discloses one of the problems that Singh attempts to solve. Nonetheless, in describing such a problem, Singh explicitly discloses that “[s]uch a wide disparity of options is typically implemented in conventional approaches by simply expanding the memory used to cover all the possible cases, with little flexibility.” On the other hand, claim 1 expressly recites that the multicast packet duplication system is configured for improving a size of memory

utilized by the system by using at least some of the descriptors rather than by expanding physical memory to cover all possible duplication requests.

Therefore, Applicants respectfully submit that Singh clearly teaches away from at least the above claimed limitation and thus cannot be combined with other references to support claim rejections under 35 U.S.C. § 103(a) as mandated by the 35 U.S.C. § 103 jurisprudence.

(ii) Claim 1 recites at least the claimed limitation “a number of duplications of the packet . . . is duplicated on a per port basis by transmitting the packet to at least some of the plurality of output ports that are specified in at least some of the descriptors rather than by transmitting and duplicating the packet . . . to all of the plurality of output ports . . . .”

In explaining its detailed replication technique, Tang first discloses “[t]he replication engine uses the L3 information, including the MET pointer, MAC SA and LTL index to perform the necessary replication operations . . . For frames destined to ports on VLANs other than the ingress VLAN, the replication engine rewrites those frames.” Col. 14, ll. 4-15. More importantly, Tang then expressly requires that “[s]pecifically, each port on the switch receives the frame driven over the switching bus 310 and the port select signals derived from the LTL index instruct only those selected ports to ‘keep’ the frame; all other ports discard the frame . . . .” Col. 14, ll. 16-23 (emphasis added.) In other words, it is clear that Tang’s duplication mechanism requires that each output port in Tang’s approach receive the frame.

Applicants respectfully submit that Tang clearly teaches away from at least the above claimed limitation because all the output (or egress) ports other than the ingress (input) port on

the switch receive the frame to be replicated and thus discloses the exact opposite of what the claims require. In other words, Tang's explicit requirement of receiving the frame on all the output ports clearly teaches away the aforementioned claimed limitation which requires transmitting the number of duplications to at least some of the output ports rather than to all of the output ports.

Therefore, Applicants respectfully submit that Tang clearly teaches away from at least the above claimed limitation and thus cannot be combined with other references to support claim rejections under 35 U.S.C. § 103(a) as mandated by the 35 U.S.C. § 103 jurisprudence.

As such, Applicants respectfully submit that the both Tang and Singh cannot be combined with other references to support claim rejections under 35 U.S.C. § 103(a) as mandated by the 35 U.S.C. § 103 jurisprudence for at least the foregoing reasons.

B. MPEP mandates that the proposed modification cannot change the principle of operation of a reference, and that the suggested combination may not require a substantial reconstruction and redesign of the elements in [the primary reference] as well as a change in the basic principle under which the [primary reference] construction was designed to operate." MPEP § 2143.01 citing *In re Ratti*, 270, F.2d 810, 813, 123 USPQ 349, 352 (CCPA 1959) (emphasis added.)

(i) As Applicants respectfully presented in sub-section A immediately above, the basic principle of Tang's approach requires that all the output ports receive the frame to be duplicated. Nonetheless, in order to support claim rejections under 35 U.S.C. § 103(a), Tang's approach must be modified such that Tang's approach no longer transmits the frame to be replicated to all

the output ports. That is, Applicants respectfully submit that Tang's approach non-selectively transmits the frame to all the output ports for replication. As a result, Tang's index, the LTL 350, and the select signals are rendered useless because there will be no frames to discard after the alleged modification. See Col. 14, ll. 16-23.

On the other hand, the alleged combination must be modified so as to perform the aforementioned claimed limitation. Applicants respectfully submit that this modification clearly amounts to the prohibited substantial redesign and reconstruction that is prohibited by MPEP § 2143 and the 35 U.S.C. § 103 jurisprudence because Tang only discloses the replication of the frame on all the output ports but does not even remotely suggest its replication may be performed on at least one but not all of the output ports.

(ii) In addition, Tang's approach requires an index to uniquely identify an output port, and thus requiring Tang's index to be shared among multiple output ports inevitably changes the basic principle under which Tang is designed to operate and invariably requires substantial, if not complete, reconstruction and redesign of Tang's approach in selecting the ports for replication. In addition, Applicants respectfully submit that Tang's approach non-selectively transmits the frame to all the output ports for replication. As a result, Tang's index, the LTL 350, and the select signals are rendered useless because there will be no frames to discard after the alleged modification. See Col. 14, ll. 16-23. Therefore, the alleged modification clearly renders Tang's approach unsatisfactory and at least a part of Tang's approach (e.g., the indices, the LTL 350, and the select signals) inoperable for its intended functions.

As such, Applicants respectfully submit that the alleged combination of Tang and other reference inevitably changes Tang's basic principle of operation of replicating the frame on all the output ports and invariably requires the prohibited substantial reconstruction and redesign and thus violates the mandate of MPEP § 2143 and 35 U.S.C. § 103 jurisprudence.

C. Applicants first respectfully submit that MPEP requires that "[a] prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention." MPEP § 2141.03 citing *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984) (emphasis added.)

Applicants respectfully submit that the final Office action clearly fails to consider Tang's explicit teaching-away disclosure as presented in sub-sections A-B immediately above. Therefore, Applicants respectfully submit that the final Office action fails to considers Tang's disclosure in its entirety and thus fails to properly establish a proper prima facie case under 35 U.S.C. § 103(a) as mandated by MPEP

## **II. Rejections of Claims under 35 USC § 103(a)**

Claims 31-32 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Wong in view of Fig. 1 of the instant Application. Applicants respectfully traverse.

Applicants respectfully submit that claim 31-32 depend from claim 21, which has been allowed, and that claims 31-32 are thus believed to be allowable over Wong and Fig. 1 of the instant application regardless of whether Fig. 1 of the instant application discloses or suggests these additional claimed limitations embodied in claims 31-32.

**III. Allowable Subject Matter**

Applicants wish to thank the examiner for allowing claims 21 and 23-25. Applicants respectfully acknowledge that claims 21 and 23-25 are allowed. Applicants further respectfully submit that claims 21 and 25 are currently amended to correct some minor clerical informality, and that the current amendment to claims 21 and 25 does not introduce any new matter.

**CONCLUSION**

Based on the foregoing, all claims are believed allowable, and an allowance of the claims is respectfully requested. If the Examiner has any questions or comments, the Examiner is respectfully requested to contact the undersigned at the number listed below.

To the extent that any arguments and disclaimers were presented to distinguish prior art, or for other reasons substantially related to patentability, during the prosecution of any and all parent and related application(s)/patent(s), Applicant(s) hereby explicitly retracts and rescinds any and all such arguments and disclaimers, and respectfully requests that the Examiner re-visit the prior art that such arguments and disclaimers were made to avoid.

The Commissioner is authorized to charge any fees due in connection with the filing of this document to Vista IP Law Group's Deposit Account No. 50-1105, referencing billing number RZMI-P0310-US. The Commissioner is authorized to credit any overpayment or to charge any underpayment to Vista IP Law Group's Deposit Account No. 50-1105, referencing billing number RZMI-P0310-US.

Respectfully submitted,

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